

POWER SECTION

Model No: AT475786.4

Revised: 9/22/2020

Rotor Specifications	
	inches
Overall Length	226.00
Contour Length	220.00
Major Diameter	3.029
Eccentricity	0.170
Head diameter	3.250
Thread Form	1.375-6 SA
Weight	372 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	235.00
Tube OD	4.75
Tube ID	3.88
Rubber Cutback Top/End	8.00 / 8.00
Weight	550 lbs
Number of Stages	6.4
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD						
.5 OS	2.695	-0.005	0.009	0.022	0.042	0.056
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

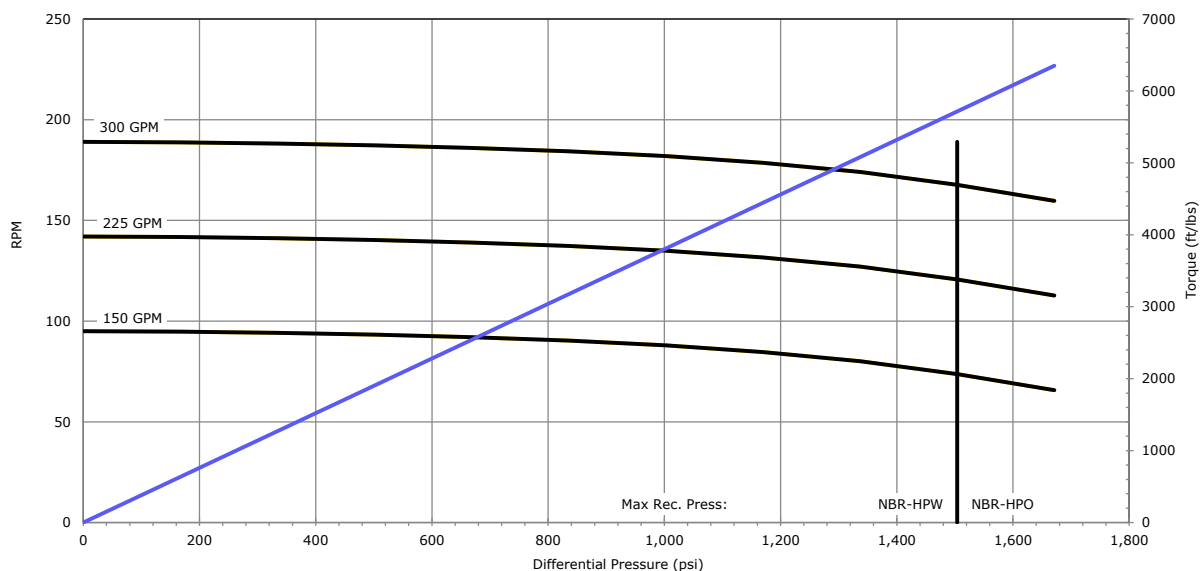
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD						
.5 OS	2.695	-0.005	0.009	0.022	0.042	0.056
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	150 - 300
Speed Range (rpm)	90 - 190
Torque Slope (ft-lb/psi)	3.80
Rotation (rev/gal)	0.630
Off Bottom Pressure (psi)	80

Performance Details		NBR-HPW	NBR-HPO
Max Diff Press (psi)		1510	1510
Stall Diff Press (psi)		2370	2370
Max Torque (ft-lb)		5720	5720
Stall Torque (ft-lb)		9010	9010

■ (NBR-HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 75°F ³ BHCT Exceeding 320°F will void warranty for NBR-HPW/HPO.

Performance curves are based on new rotor and stator dimensions and for reference only. Actual performance may vary depending on fit and drilling conditions. The stall torque may exceed that specified for the connected components. Operating over the recommended limits may result in damage to the power section and connected components. Please visit www.AbacoDrilling.com for the latest specification revisions.

LOCATIONS

US: Headquarters 713 Northpark Central Dr., #400 Houston, TX 77073 - Tel: (281) 869-0700 - Fax: (281) 869-0701
 US: Sales & Distribution 11308 West Interstate 20 East, Odessa, TX 79765 - Tel: (432) 248-1814
 CANADA: Stator Manufacturing 6303-39th Street Leduc, Alberta T9E 0Z3 Canada - Tel: (780) 986-8947 - Fax: (780) 986-8842
 DUBAI UAE: Stator Manufacturing Oilfields Supply Center B#57, Jebel Ali, Dubai UAE, P.O. Box 19909 - Tel: 971-4-870-8600

POWER SECTION - METRIC

Model No: AT475786.4

Revised: 9/22/2020

Rotor Specifications	
	mm
Overall Length	5740.4
Contour Length	5588.0
Major Diameter	76.94
Eccentricity	4.31
Head diameter	82.55
Thread Form	1.375-6 SA
Weight	169 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	5969.0
Tube OD	120.7
Tube ID	98.4
Rubber Cutback Top/End	203.0 / 203.0
Weight	249 kg
Number of Stages	6.4
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD						
.5 OS	68.45	-0.13	0.49	0.80	1.11	1.42
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

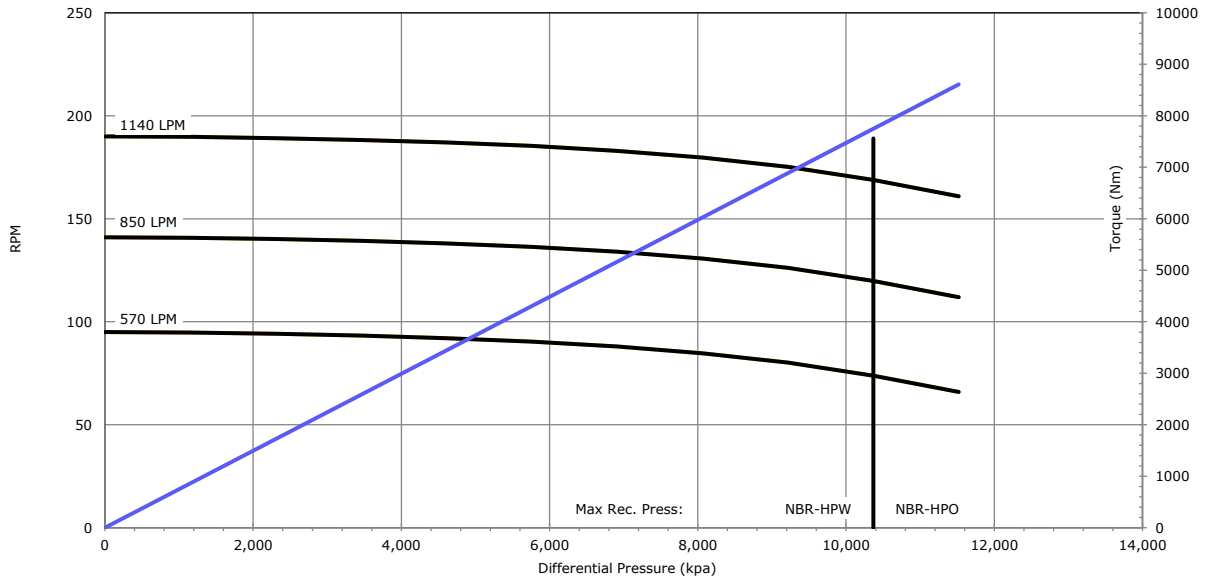
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD						
.5 OS	68.45	-0.13	0.49	0.80	1.11	1.42
1.0 OS						
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	570 - 1140
Speed Range (rpm)	90 - 190
Torque Slope (Nm/kpa)	0.75
Rotation (rev/Liter)	0.1664
Off Bottom Pressure (kpa)	570

Performance Details		
	NBR-HPW	NBR-HPO
Max Diff Press (kpa)	10400	10400
Stall Diff Press (kpa)	16300	16400
Max Torque (Nm)	7800	7800
Stall Torque (Nm)	12300	12300

■ (NBR-HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 25°C ³ BHCT Exceeding 160°C will void warranty for NBR-HPW/HPO.

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